

# Durethan® AKV35HRH2.0

## PA66–GF35

35% Glass Reinforced, Injection Molding, Heat Stabilized, Hydrolysis resistant

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b><i>RHEOLOGICAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Molding shrinkage (parallel)	0.38 / *	%	ISO 294–4
Molding shrinkage (normal)	1.05 / *	%	ISO 294–4
<b><i>MECHANICAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Tensile modulus	11500 / 7800	MPa	ISO 527–1/–2
Stress at break	195 / 135	MPa	ISO 527–1/–2
Strain at break	3.1 / 6	%	ISO 527–1/–2
Flexural modulus	10700 / 7000	MPa	ISO 178
Flexural strength	305 / 210	MPa	ISO 178
Charpy impact strength (+23°C)	85 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	75 / 80	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (–30°C)	<10 / <10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	<10 / <10	kJ/m <sup>2</sup>	ISO 180/1A
<b><i>THERMAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Melting temperature (10°C/min)	262 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	245 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.8 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10

## Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Oxygen index	26 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	650 / -	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	2 / -	mm	IEC 60695-2-12

### ***ELECTRICAL PROPERTIES***

#### ***DRY / COND***

Relative permittivity (100Hz)	3.9 / -	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.6 / -	-	IEC 62631-2-1
Dissipation factor (100 Hz)	100 / -	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	150 / -	E-4	IEC 62631-2-1
Volume resistivity	1E13 / -	Ohm*m	IEC 62631-3-1
Electric strength	35 / -	kV/mm	IEC 60243-1
Comparative tracking index	425 / -	V	IEC 60112

### ***OTHER PROPERTIES***

#### ***DRY / COND***

Water absorption	5.2 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1410 / -	kg/m <sup>3</sup>	ISO 1183

### ***PROCESSING RECOMMENDATIONS***

#### ***VALUE***

Drying temperature dry air dryer	80	°C
Drying time dry air dryer	2-6	h
Melt temperature (Tmin – Tmax)	280-300	°C
Mold temperature	80-120	°C